

SFR Entrance Criteria

1. Timing considerations
 - 1.1. Has a System Requirements Review (SRR) been successfully completed?
 - 1.2. Is the program ready to conduct an SFR based upon SFR entry criteria vice a pre-determined schedule date?
 - 1.3. Have all prior technical review Requests For Action (RFAs) been properly dispositioned, and closed?
 - 1.4. Is the program using an effective Integrated Data Environment (IDE) to store data?
2. Planning
 - 2.1. Was a chairperson assigned in coordination with the buying activity?
 - 2.2. Did the review agenda address all applicable SFR Review Elements per paragraph 5.a of the SFR Systems Engineering Technical Review Handbook Module?
 - 2.3. Was the Systems Engineering Technical Review Board properly staffed, and did the appropriate competencies participate in the review?
 - 2.4. Was a Systems Engineering Plan (SEP - formerly Systems Engineering Management Plan - SEMP) developed and implemented?
 - 2.5. Was a Manpower Estimate Report completed and approved? (ACAT I Only)
 - 2.6. Was the Acquisition Strategy developed and documented?
 - 2.7. Does the Acquisition Strategy address a plan to satisfy Human Systems Integration (HSI) requirements for each domain addressed in the Capability Development Document (CDD), including minimum standards for those domains not specifically addressed in the CDD?
3. Program Schedule
 - 3.1. Is the schedule reflective of available resources?
 - 3.2. Does the program schedule have an identified critical path?
 - 3.3. Is the critical path consistent with overall technical risk, and are the critical path tasks based upon the preferred system concept and system specification?
 - 3.4. What is the status versus Critical Path?
4. Management metrics relevant to life cycle phase
 - 4.1. Cost / Schedule / Performance / Key Performance Parameters (KPP) – Status versus Plan. Is the latest revised estimate of each KPP in

- accordance with the Acquisition Program Baseline? Are the KPPs reflective of program risks and technical results?
- 4.2. Has the Cost Analysis Requirements Description (CARD) been developed, and is it consistent with the system specification and latest estimates of costs?
- 4.3. Latest estimate of development costs – Is the estimate consistent with the technical risk of the program, the programs critical path plan, and available resources?
- 4.4. Earned Value Management (EVM), if applicable
- 4.4.1. Is the EVM data up-to-date?
 - 4.4.2. Is the EVM baseline being used as a program execution tool (i.e. by management and at the working level)?
 - 4.4.3. Are the work packages based on earned value vice level of effort?
 - 4.4.4. Is the EVM data (critical path identification) consistent with known technical risks and challenges in the program?
 - 4.4.5. Are the EVM data being used to adjust program resources to address risk issues?
- 4.5. Is the Work Breakdown Structure (WBS) consistent with the cost account structure and the Program Plan/SEP?
- 4.6. Are software metrics, particularly sizing, known for each software element of the system concept?
5. Program Staffing
- 5.1. Is there a complete organization structure shown and is the organization consistent with the technical challenges/risks of the program?
 - 5.2. Are key government / contractor interfaces identified and are these consistent with program risks?
 - 5.3. Is adequate staffing (required expertise and quantity of expertise) available to execute the schedule?
 - 5.4. Is there confidence that all required flight clearance performance monitors are involved and concur with the system requirements?
6. Processes, as applicable
- 6.1. Program Management processes as detailed in the Program Management Plan – Are the program management processes that are in place adequate to address the technical challenges of the program and adequate to address program risks?
 - 6.1.1. Is there an updated Program Management Plan that is reflective of the emergent technical issues and risks?

- 6.1.2. Are there Program Management processes in place to properly manage the system requirements and attendant technical emphasis areas?
- 6.1.3. Is the program being managed to adjust resources and to address issues?
- 6.2. Configuration Management (CM) processes as detailed in the Configuration Management Plan
 - 6.2.1. Is the CM plan in place and up-to-date? (if available)
 - 6.2.2. Are the end-item system's functions addressed by the CM plan and are these functions tracked as an integrated part of the managed System Configuration?
 - 6.2.3. Are changes to the Functional Requirements controlled and tracked to higher level (System Specification and CDD, and lower level system requirements) documents?
- 6.3. Systems Engineering processes (EIA-632, etc.) as detailed in the Systems Engineering Plan (SEP)
 - 6.3.1. Is there a defined system engineering process?
 - 6.3.2. Are the processes shared by the government and contractor (if applicable) team?
 - 6.3.3. Are the planned technical reviews in place and properly placed (event driven vice schedule driven)?
 - 6.3.4. Are the SE processes adequate to support the technical requirements of the technical reviews? Are the technical teams working against a defined technical baseline?
 - 6.3.5. Is there a HSI IPT and/or an active HSI Working Group (to include Project Management, Logistics, Engineering, other) assigned for this procurement?
 - 6.3.6. Is there a comprehensive HSI plan or equivalent, in accordance with DOD 5000.2 to optimize total system performance?
 - 6.3.7. Is HSI included in the Spec., SOW, CDRLS, CLINS and sources sought?
 - 6.3.8. Have the results and/or recommendations of the Electromagnetic Environmental Effects (E³) IPT or Working Group/EMCAB (Electromagnetic Compatibility Assessment Board) been incorporated into the Systems Engineering Plan?
- 6.4. Requirements Management
 - 6.4.1. Is there a process in place for requirements management and is it being applied to properly address this stage of the program?

- 6.4.2. Are requirements being managed and traced from higher level (parent) requirements to lower level (offspring) requirements?
- 6.4.3. Are there any orphan or childless requirements?
- 6.4.4. Is adequate requirements traceability in place to ensure compliance with the CDD/CPD at OT&E?
- 6.4.5. Are both effectiveness and suitability requirements being addressed in the systems requirements?
- 6.4.6. Do analyses of preliminary designs and processes indicate that identification and management of Critical Safety Items are being considered at the system level and are being flowed down to the subsystem and component levels?
- 6.5. Risk Management processes as detailed in the Risk Management Plan
 - 6.5.1. Is there a defined risk management process? Is the Risk Management Plan up to date and being used?
 - 6.5.2. Is the risk management process shared by the government and contractor (if applicable) team?
 - 6.5.3. Does the risk management process properly track all risks on a continuous basis and provide for update of the mitigation approaches?
 - 6.5.4. Are mitigation approaches in place for all moderate and high risks? Are risk mitigations resourced?
 - 6.5.5. Does the risk management process provide for risk updates to support the technical reviews and program management (acquisition) reviews?
- 6.6. Test processes as detailed in the Test and Evaluation Master Plan (TEMP) and in the contractors overarching Test and Evaluation (T&E) strategy.
 - 6.6.1. Are test requirements tied to system requirements?
 - 6.6.2. Have facilities/test resources (contractor and government) been defined and included in the planning?
 - 6.6.3. Is there User buy-in to the above test planning? Are there provisions for User participation?
 - 6.6.4. Are Human Systems Integration (HSI) metrics incorporated into the program's Test & Evaluation activities?
- 6.7. Has the program team accessed and applied Knowledge Management lessons learned?
- 7. [FORCEnet](#) Compliance Checklist (high level topics specific to the Navy's networked, distributed combat force requirements for implementation of Network Centric Warfare)

- 7.1. It is necessary to utilize the most current checklist for more detailed breakdown of requirements and address all requirements applicable to the program at this stage of development.
- 7.2. Conforms with FORCEnet Operational Requirements (Ref FORCEnet Initial Capabilities Document (ICD), FORCEnet Report to Congress (RTC))
 - 7.2.1. Compliant with the FORCEnet Capabilities-Based Operational Requirements (CBOR) Compliance Action List (CAL)
 - 7.2.2. Maps to and supports the interim Sea Power 21/FORCEnet Capabilities List (FCL)
- 7.3. Conforms with FORCEnet System/Technical Requirements (Ref FORCEnet Architectures and Standards, Volumes I & II, CJCSI 6212.01)
 - 7.3.1. Compliant with FORCEnet Architectures and Standards (A&S) Computer-Aided Logistics (CAL)
 - 7.3.2. Open Architecture, and supports Open Architecture Computing Environment
 - 7.3.3. Internet Protocol (IP) based and IPv6 compatible by 2008, or provides reasonable transition plan
 - 7.3.4. Complies with DoD-directed Architectures; e.g., Global Information Grid (GIG), GIG Net-Centric Operations & Warfare (NCOW) Reference Model, Joint Technical Architecture (JTA)
 - 7.3.5. Conforms with DoD/Joint Initiatives; e.g., Transformational Communications Architecture (TCA), GIG Bandwidth Expansion (GIG-BE), Teleports, Net-Centric Enterprise Services (NCES), Joint Tactical Radio System (JTRS), Family of Interoperable Operational Pictures (FIOP), Single Integrated Air Picture (SIAP), Joint Battle Management Command & Control (JBMC²)
 - 7.3.6. Compatible with approved Information Systems Requirement (ISR) Architectures
- 7.4. Conforms with FORCEnet Support/Policy Requirements (Ref CJCSI 6212.01)
 - 7.4.1. Compliant with Human Systems Integration (HSI) CAL
 - 7.4.2. Addresses Bandwidth (BW) and related issues, including throughput requirement and options to mitigate BW, adequate class/quality of service, and life-cycle cost of commercial Satellite Communications (SATCOM) BW and terrestrial leased connectivity
 - 7.4.3. Compliant with Spectrum Management (SM) CAL
 - 7.4.4. Compliant with Information Assurance (IA) CAL
 - 7.4.5. Compliant with National/Space (N/S) policy

- 7.4.6. Compliant with Department Chief Information Officer (CIO) policy
 - 7.5. Conforms with FORCEnet Implementation Requirements (Ref CJCSI 3170.01, CJCSI 6212.01, and DODD/I 5000.1)
 - 7.5.1. Compliant with Chairman, Joint Chiefs of Staff (CJCSI) Instructions and Joint Interoperability (JI) CAL (See added details item 8 below)
 - 7.5.2. Compliant with Department of Defense Directives/Instructions (DODD/I)
- 8. Battlespace engineering requirements per Joint Capabilities Integration and Development System (JCIDS) Chairman of the Joint Chiefs of Staff Instruction CJCSI 3170.01D 12 March 2004
 - 8.1. Has coordination among Department of Defense (DOD) Components, international systems from allies and cooperative opportunities been accomplished to achieve substantive improvements in joint warfighting and interoperability in the battlespace of the future?
 - 8.2. Assess existing and proposed capabilities in light of their contribution to future joint concepts. The process must produce capability proposals that consider the full range of doctrine, organization, training, materiel, leadership and education, personnel and facilities (DOTMLPF) solutions in order to advance joint warfighting.
 - 8.3. Potential solutions may include a family of systems (FoS) that takes different approaches to filling the capability gap, each addressing operational considerations in a different way. Alternatively, the capability may require a system of systems (SoS) approach to fill a capability gap. The FoS and SoS materiel solutions may also require systems delivered by multiple sponsors/materiel developers.
 - 8.4. Review the Functional Solution Analysis (FSA) to confirm and document approach solves (or mitigates) one or more of the capability gaps (needs) identified in the Functional Needs Analysis (FNA).
- 9. The process to identify capability gaps and potential solutions must be supported by a robust analytical process which incorporates innovative practices - including best commercial practices, collaborative environments, modeling and simulation and electronic business solutions.
- 10. System Requirements
 - 10.1. Are system requirements traced to the CDD?
 - 10.2. For the overall system, the following system requirements should be assessed, as applicable:
 - 10.2.1. Have the KPPs and other performance requirements, both explicit and derived been defined, quantified and documented?
 - 10.2.2. Have all of the explicit and derived system requirements and system constraints been documented in the system specification?

- 10.2.3. Are derived requirements (Critical Technical Parameters (CTPs) / Critical Operational Issues (COIs)) traceable to system requirements?
- 10.2.4. Have airworthiness requirements been addressed and documented in the system specification?
- 10.2.5. Have Reliability, Maintainability and Built-in Test (BIT) requirements been addressed in the system requirements?
- 11. Address the below areas similarly
 - 11.1.1. Electromagnetic Environmental Effects (E³) and Spectrum Supportability
 - 11.1.1.1. Does the CDD address spectrum certification compliance, spectrum supportability, host nation approval, the control of E³, and safety issues regarding the hazards of electromagnetic radiation to ordnance (HERO)?
 - 11.1.1.2. Have analyses been completed and submitted for all RF spectrum dependent equipment?
 - 11.1.1.3. Has the Integrated design analysis/study been initiated?
 - 11.1.1.4. Has the intended Operational Electromagnetic Environment (EME) been defined?¹
 - 11.1.1.5. Have all the box-level requirements of MIL-STD-461E been addressed?
 - 11.1.1.6. Have all the system-level requirements of MIL-STD-464A been addressed?²
 - 11.1.1.7. Does the program schedule allow adequate time between prototyping and first flight to conduct flight worthiness Electromagnetic Interference (EMI) testing?
 - 11.1.1.8. Does the program schedule allow adequate time to correct EMI deficiencies prior to production start?
 - 11.1.1.9. Has the requirement and funding for a [National Voluntary Laboratory Accreditation Program](#) (NVLAP) facility for EMI/ Electromagnetic Compatibility (EMC) demonstration testing been established?
 - 11.1.1.10. Are E³ and spectrum management included in the SOW, CDRLS and CLINS as appropriate?
 - 11.1.2. Producibility

¹ MIL-STD-464A defines typical EMEs

² This includes electrical bonding, precipitation static (P-static), electrostatic discharge (ESD), subsystem EMI (including COTS and NDI), intra-system EMC, inter-system EMC and High Intensity radiated Fields (HIRF), lightening effects (direct and indirect), radiation hazards (HERO, HERP and HERF), TEMPEST and Electromagnetic Pulse (EMP) effects and life-cycle E3 hardening.

- 11.1.3. Human System Safety - Does the design (new, baseline, modification) require any of the following analyses?
 - 11.1.3.1. Preliminary Hazard,
 - 11.1.3.2. Operating and Support Hazard,
 - 11.1.3.3. Safety Assessment Reports,
 - 11.1.3.4. Hazard Tracking and Risk Solutions
- 11.1.4. Aeromechanics
- 11.1.5. Structures
- 11.1.6. Materials
- 11.1.7. Human Systems Engineering - Have the following Human Systems Engineering Requirements been considered in the system requirements?
 - 11.1.7.1. Human Performance and error avoidance
 - 11.1.7.2. Human Interfaces
 - 11.1.7.3. Has the program developed training systems plans to maximize use of new learning techniques, modeling and simulation technology, embedded training, and instrumentation systems that provide anytime, anyplace training and reduce the demand on the training establishment?
 - Was a Training System Requirements Analysis conducted?
 - Were embedded training capabilities considered?
 - 11.1.7.4. Design for Usability?
 - 11.1.7.5. Design for Maintainability?
 - 11.1.7.6. Task and equipment Standardization?
 - 11.1.7.7. Aviation life support/aircrew escape and survival
- 11.1.8. Habitability - Have the following Habitability Requirements been considered in the system requirements?
 - 11.1.8.1. Quality Of Life?
 - 11.1.8.2. Quality of Work?
 - 11.1.8.3. Environmental Limits and Control?
 - 11.1.8.4. Personnel Services?
- 11.1.9. Survivability - Have the following Survivability Requirements been considered in the system requirements?
 - 11.1.9.1. Anti-Fratricide?
 - 11.1.9.2. Personnel Protection?

- 11.1.9.3. Damage Control?
- 11.1.9.4. Performance Effects of Ensembles?
- 11.1.10. Environment, Safety and Occupational Health (ESOH) - Has the following ESOH requirements been considered in the system requirements?
 - 11.1.10.1. Accident Avoidance?
 - 11.1.10.2. Safety Hazard Avoidance?
 - 11.1.10.3. Health Hazard Avoidance?
 - 11.1.10.4. Risk Mitigation?
 - 11.1.10.5. Medical?
- 11.1.11. Have all logistics requirements been considered in the system requirements?
- 11.1.12. Has Supportability been considered in the system requirements?
- 11.1.13. Have the diagnostics requirements been addressed in the system requirements?
- 12. Have the below logistics aspects been considered?
 - 12.1.1. Maintenance Planning
 - 12.1.1.1. Has the initial maintenance concept been substantiated by Repair level Analysis and documented in the [Acquisition Logistics Support Plan](#) (ALSP)?
 - 12.1.1.2. Have maintenance trade cost studies been conducted that support the prescribed maintenance concept?
 - 12.1.1.3. Is Reliability Centered Maintenance analysis planned?
 - 12.1.1.4. Have initial estimates of depot capability/capacity and resource requirements been made and documented?
 - 12.1.1.5. Have funding requirements for interim support, transition planning, and establishment of organic capability been identified and documents in the [Logistics Requirements Funding Summary](#) (LRFS)?
 - 12.1.2. Manpower, Personnel and Training (MP&T)
 - 12.1.2.1. Does the ALSP reflect the results of the Training Planning Process Methodology (TRPPM) analysis?
 - 12.1.2.2. Has a Training Systems Plan (TSP) been developed and validated?
 - 12.1.2.3. Were the threshold requirements from the Capability Production Document (CPD)/Capability Development Document

(CDD) used in the development of the manpower, personnel, and training requirements?

12.1.2.4. Does the explanation of manpower requirements clearly articulate qualifications and skills required?

12.1.2.5. Is there a Required Operational Capability (ROC) and Projected Operational Environment (POE) (or equivalent planning parameters) that address this system? Do the manpower requirements in the TSP support the ROC/POE?

12.1.2.6. Does the TSP reflect the most current manpower requirements data available? Are all billet requirements, designators, occupational specialty codes, and ratings identified in the TSP?

12.1.2.7. Are training course requirements identified?

12.1.2.8. Are training requirements documented for DT&E and OT&E?

12.1.2.9. Is the acquisition strategy for Training Equipment and Devices (TE&D) documented?

12.1.2.9.1. Are the MP&T requirements consistent with the Supportability Analysis and level of repair prescribed in the maintenance concept?

12.1.2.9.2. Do the identified tasks link to functions that are traced to Mission Essential Task Lists (METLS) and Joint Mission Essential Task Lists (JMETLS)?

12.1.2.9.3. Does the LRFS reflect funding for course and materials development factory training and TE&D?

12.1.3. Supply Support

12.1.3.1. Has a Supply Support Management Plan been developed?

12.1.3.2. Have Performance Based Logistics (PBL) concepts been incorporated as the preferred supply support strategy?

12.1.3.3. Have Material Support Date (MSD) and Operational Support Date been determined and the requirements for Interim Contractor Supply Support (if any) identified?

12.1.3.4. Is provisioning technical documentation (PTD) being ordered in the SDD contract?

12.1.3.5. Are initial sparing analysis and modeling assumptions consistent with the prescribed maintenance concept?

12.1.3.6. Are spares, provisioning technical documentation, interim contractor support, etc. reflected in the LRFS?

12.1.4. Support Equipment

12.1.4.1. Are the critical testability issues identified in the TEMP?

- 12.1.4.2. Are the GFP requirements for test defined?
- 12.1.4.3. Does the LRFS document funding requirements for required support equipment?
- 12.1.4.4. Does the ALSP document the plan for the development and deployment of Test Program Sets, Maintenance Assistance Modules, and Test Requirement Documents?
- 12.1.4.5. Are the requirements for the SDD contractor to deliver Support Equipment Recommendation Data (SERD) clearly identified?
- 12.1.4.6. Have support equipment integration issues been identified and coordinated with administrative sponsors and buying activity program managers?
- 12.1.4.7. Design
- 12.1.4.8. Have analyses to identify the optimum mix of automatic and manual fault detection and isolation equipment at each applicable maintenance level been conducted?
- 12.1.4.9. Is the level of repair analysis complete for each configuration item for each maintenance level to identify optimum mix of BIT, semi-automatic test equipment and general purpose test equipment?
- 12.1.4.10. Are other automatic test equipment and BIT compatible?
- 12.1.4.11. Will Preliminary BIT/testability analysis be completed by Preliminary Design Review (PDR)?
- 12.1.4.12. Will detailed BIT/testability analysis be completed by Critical Design Review (CDR)?
- 12.1.4.13. Has the effectiveness of BIT been validated by testing?
- 12.1.5. Technical Data
 - 12.1.5.1. Is technical data being acquired in digital electronic form enabling life-cycle support using digital operations?
 - 12.1.5.2. Have Technical Data Package (TDP) requirements been identified and documented in the ALSP?
 - 12.1.5.3. Are full data rights being procured?
 - 12.1.5.4. If commercial items are being procured, has the potential effect on technical manual and engineering drawing development been considered and mitigated?
 - 12.1.5.5. Is the level of technical data being procured consistent with levels of repair prescribed in the maintenance concept?

12.1.5.6. Is the SDD contractor required to deliver source data packages for technical manuals and weapons loading manuals in time to support Test and Evaluation events?

12.1.6. Computer Resources

12.1.6.1. Has the Computer Resources Support (CRS) concept been documented in a Computer Resource Life Cycle Management Plan (CRLCMP), or as a part of the ALSP?

12.1.6.2. Has a Computer Resource Working Group (CRWG) been established?

12.1.6.3. Has the Supply Support Activity (SSA) been designated and personnel training, and facility requirements identified?

12.1.6.4. Are unique system features, use of off-the-shelf software, application of industry standards, and the relationship of the system architecture to service standards documented and methods of risk management identified?

12.1.6.5. Is planning in place to obtain data rights and licenses to make software available for re-use or export to other Government programs?

12.1.7. Facilities

12.1.7.1. Have the types of facilities required to support and sustain the new or modified system been identified? Such as:

1.1.1..1. Support facilities, supply warehouses, transit sheds, maintenance facilities, training facilities (both classrooms and trainers for operational training and maintenance training), etc.

1.1.1..2. Transient support requirements when the system requires some level of support at continental U.S. and outside of the U.S. activities that are not regular support sites.

12.1.7.2. Have MILCON requirements been identified in the LRFS?

12.1.7.3. Does the ALSP include analysis conducted to determine facility requirements?

12.1.7.4. Is there a Facilities Requirements Document and a schedule to conduct Site Surveys?

12.1.7.5. Has a Proposed Military Improvement (PMI) document been prepared and forwarded to the sponsor to identify required alterations?

12.1.7.6. Is the facilities requirement development process integrated with the supportability analysis process?

12.1.8. Packaging, Handling, Storage & Transportation (PHS&T)

- 12.1.8.1. Have potential PHS&T related problems been identified and are risk mitigation plans in place?
- 12.1.8.2. If new hazardous materials are being introduced, are PHS&T plans adequate to meet statutory and regulatory requirements?
- 12.1.8.3. Does the LRFS identify PHS&T funding requirements?
- 12.1.9. Design Interface (Reliability, Maintainability & Availability)
 - 12.1.9.1. Risk Management
 - 12.1.9.1.1. Have logistics program risks been identified, assessed and mitigated?
 - 12.1.9.1.2. How were risks handled in terms of equipment-level reliability, maintainability and unit cost?
 - 12.1.9.2. Design reference Mission Profile
 - 12.1.9.2.1. Have logistics use profiles and associated timelines been prepared and updated over the life cycle based on the system detail design and maintenance plan?
 - 12.1.9.2.2. How was a range of Operational Availability (A_o) targets developed?
 - 12.1.9.2.3. Is documentation in place describing plans for follow-on tracking, monitoring analysis and reporting for A_o and tracking components of A_o in an operational environment?
 - 12.1.9.3. Are reliability and maintainability requirements adequately specified in the system specification and the TEMP?
 - 12.1.9.4. Does DT and OT management agree on test methodology for reliability and maintainability requirements?
 - 12.1.9.5. Does the ALSP identify when Failure Modes, Effects and Criticality Analysis (FMECA) will be conducted and integrated with the Supportability Analysis program?
 - 12.1.9.6. Is reliability development testing (test, analyze and fix) planned for SDD phase?
 - 12.1.9.7. Are Built In Test (BIT) and onboard diagnostics requirements adequately specified in the system specification and TEMP?
 - 12.1.9.8. Is there a mechanism established for logisticians, engineers and cost analysts to exchange data pertaining to the elements of system design and formal methods in place to review and document system design changes for impact on logistics support and program life-cycle cost?
- 12.1.10. Interoperability - Will the envisioned system be interoperable with all required elements?

- 12.1.11. Interoperability - Is [Joint Interoperability Test Command](#) (JITC) involved with the DT/OT testers?
- 12.1.12. Have all aspects of Integration/Interface with other systems been considered in the system requirements (functional and physical interfaces)
- 12.1.13. Are the system requirements testable? Are there plans in place to cover verification via other means as required (analysis, simulation, etc.) Is there buy-in among all stakeholders as to these approaches?
- 12.1.14. For Computer/Software CIs, is there sufficient functional detail to enable detailed design (i.e. development of program performance specifications) from which coding can occur?
- 12.2. For the overall system, and each Configuration Item, have the following system constraints been addressed in the system performance requirements?
 - 12.2.1. Have physical interfaces been considered in the systems performance requirements? Have proper tradeoffs been made?
 - 12.2.2. Has development cost been considered in the system requirements?
 - 12.2.3. Have production cost budgets been established and have these been considered in the system requirements?
 - 12.2.4. Have operations and support costs been considered in the system requirements?
 - 12.2.5. Have weight budgets been established for all CIs?
 - 12.2.6. Has CI weight and its impact of overall system weight been considered and properly traded?
 - 12.2.7. Volume Budget?
 - 12.2.8. CI Volume impact?
 - 12.2.9. Power Budget?
 - 12.2.10. CI Power impact?
 - 12.2.11. Cooling Budget?
 - 12.2.12. CI Cooling impact?
 - 12.2.13. Available technology / system growth – Have the requirements for technology insertion and system growth been allocated to the CIs and reflected in the system requirements?
 - 12.2.14. Has the platform diagnostics integration been addressed in the system requirements?
 - 12.2.15. Has Risk been considered at the CI level?

12.3. Subsystem Test Plan – Have the functional requirements been captured in the test planning and approach? Is there a method to validate and verify functionality?

12.4. Sensitivity Analysis & A_o analysis

12.4.1. How has sensitivity analysis been performed in the A_o analysis?

12.4.2. Have sensitivity curves been developed for reliability, Maintainability and other factors?

12.4.3. Which parameters were studied?

12.4.4. What are the drivers and what are the sub-systems parts most sensitive to these?

12.4.5. Where were the sensitivity analysis documented?

12.4.6. What actions have been taken to reduce the effect of A_o drivers?

12.4.7. Is there a record of A_o analyses used as design related decision (trade study) support?

12.4.8. Are trade studies being conducted on a continuous basis to ensure that the performance and supportability goals are met?

12.4.9. Where is the record maintained?

13. Program Risk Assessment

13.1. Have risk items in the system requirements been defined and analyzed?

13.2. Is the risk assessment process tightly coupled with the technical effort and reflective of the technical risks inherent in the system requirements?

13.3. Has the risk assessment addressed future risks to development?

13.4. Is there adequate buy-in among the technical team as to risks?

13.5. Have cost and schedule impacts been defined for mitigation options?

13.6. Is the technical risk assessment being shared at all levels of the Program Team?

13.7. Have supportability and logistics risk items been defined, analyzed, and included in the Program Risk Assessment?

13.8. Have cost and schedule impacts for supportability and logistics risk mitigation been documented and identified in the LRFS?

14. Completion/Exit Criteria

14.1. Were SFR issues captured in RFAs and properly adjudicated and assigned?

14.2. Were all SFR RFAs properly completed (closed)?

- 14.3. Were the proper buying activity competencies represented at the review?
- 14.4. Can the system requirements, as disclosed, satisfy the CDD?
- 14.5. Is the system functional definition and functional decomposition detailed enough to support preliminary detailed design?
- 14.6. Is there an approved System specification?
- 14.7. Are adequate processes and metrics in place for the program to succeed?
- 14.8. Are the risks known and manageable for design and development?
- 14.9. Is the program schedule executable within the anticipated cost and technical risks?
- 14.10. Is the program properly staffed?
- 14.11. Is the program non-recurring engineering (NRE) executable within the existing budget?
- 14.12. Is the preliminary CARD consistent with the approved system specification?
- 14.13. Is the software functionality in the system specification consistent with the software sizing estimates and resource loaded schedule?
- 14.14. Did the Technology Development (formerly Component Advanced Development) work effort sufficiently reduce development risks?
- 14.15. Does the status of the technical effort indicate contract compliance?
- 14.16. Are there significant issues outside the scope of the contract?